

CLAIMS.

I claim:

1. A method for creating and maintaining a human organ exchange registry containing records of donor-recipient patients in need of an organ transplant and capable
5 of and willing to donate an organ other than the one for which they have a need to another donor-recipient in need of an organ transplant and capable of and willing to donate an organ comprising the steps:

- a. creating a new donor-recipient record for a potential donor-recipient comprising compatibility parameters and matching
10 criteria including the organ or part of organ needed by the potential donor-recipient, and the organ or part of organ which can be donated by the potential donor-recipient to another potential donor-recipient using suitable software,
- b. storing the donor-recipient record in a waiting list file in a database
15 for access by other donor-recipients using suitable software, and
- c. modifying the donor-recipient record as the donor-recipient's circumstances change using suitable software.

2. The method of claim 1 wherein step a. further comprises information on the size of the organ or part of the needed organ.

20 3. The method of claim 1 wherein step a. further comprises information on the time transplantation is desired.

4. The method of claim 1 wherein step a. is performed at a transplant center and step b. is performed at a database server.

5. The method of claim 1 further comprising the step after step b.:

- b1. searching the database for matches between each new
25 donor-recipient record and donor-recipient records in the database using suitable software,

6. The method of claim 5 wherein the database is searched using a computer comprising suitable software located at the transplant center.

7. The method of claim 5 wherein the database is searched using a computer comprising suitable software located at the database server computer.

5 8. The method of claim 5 when no match between donor-recipient records is found, further comprising the step after step b1:

b2: modifying the compatibility parameters or matching criteria of the new or existing donor-recipient record,

9. The method of claim 5 when a match between donor-recipient records is found, further comprising the steps after step b1:

b2: creating a completed file if an exchange of organs takes place between patients with matched donor-recipient records, the completed file to comprise matched donor-recipient records and the outcome of the exchange,

15 b3: creating a non-completed file if no exchange of organs takes place between patients with matched donor-recipient records, the non-completed file to comprise matched donor-recipient records and the reasons for non-completion of the exchange of organs, and

b4: reentering the matched donor-recipient records in the non-completed file into the waiting list file,

10. The method of claim 1 wherein the human organ exchange registry further comprises a transplantation center list comprising centers where transplantations take place at the transplantation centers comprising the steps;

d. modifying the transplantation center list when a transplantation between donor-recipients takes place at a transplantation center with information on the transplantation and the outcome of the transplantation.

11. The method of claim 1 wherein the human organ exchange registry further comprises a medical team list comprising medical personnel at the transplantation centers where transplantations take place comprising the step;

- d. modifying the medical team list with information concerning the experience of the medical team and current location of the medical personnel.

12. The method of exchanging donatable human organs between a first person with a need for a donatable human organ transplant and a second person with a need for a donatable human organ transplant, the donatable organ needed by the second person differing from the donatable organ needed by the first person, comprising the steps:

- a. transplanting a donatable human organ needed by the first person from the second person to the first person, and
- b. transplanting a donatable human organ differing from the donatable organ needed by the first person which is needed by the second person from the first person to the second person.

13. The method of exchanging donatable human organs between a first person with a need for a donatable human organ transplant and a second person with a need for a donatable human organ transplant, the donatable organ needed by the second person differing from the donatable organ needed by the first person, and a third person with a need for a donatable human organ transplant, the donatable organ needed by the third person differing from the donatable organs needed by both the first and second persons comprising the steps:

- a. transplanting a donatable human organ needed by the second person from the first person to the second person, and
- b. transplanting a donatable human organ differing from the donatable organs needed by the first person and the second person

which is needed by the third person from the second person to the third person, and

- c. transplanting a donatable human organ differing from the donatable organs needed by the second person and the third person which is needed by the first person from the third person to the first person.

14. The method of exchanging donatable human organs between N persons with a need for a human donatable organ transplant comprising the steps:

- a. transplanting a donatable human organ needed by a first person from a second person to the second person, wherein the donatable human organ needed by the first person differs from that needed by the second person, and
- b. repeating step a. wherein the second person is termed the first person and a third person is termed the second person, until each of the N persons has received the needed donatable human organ and each of the N persons has donated a donatable human organ other than the organ needed by that person.

15. The process of exchanging a donatable human organ between a living first person in need of a human donatable organ transplant and a living second person in need of a human donatable organ transplant who is willing to donate an organ to the first person, or between the first person and a deceased third person who, while living, was willing to donate an organ to the first person, comprising the steps,

- a. forming a donor-recipient registry of persons in need of a donatable human organ who are willing to donate a different human donatable organ to another person on the registry while the donor is alive or after death of the donor, and

b. transplanting a donatable human organ to a living first person who is listed on the registry from a living second person who is listed on the registry or from a deceased third person who is listed on the registry.

16. The method of claim 12 wherein the transplantation of the organ of step b occurs after the death of the first person.

17. The method of claim 13 wherein the transplantation of the organ of step b occurs after the death of the third person.

18. The method of claim 14 wherein the transplantation of the organ of step b occurs after the death of the last person to donate an organ.